## A Transition Toward a Sustainable Energy System I

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A	Warm up!	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

Check the important words and phrases used in the session and what they mean. You can also use the read-aloud voice on the website to check your pronunciation.

<b>☑</b> Words & Phrases	訳
☐ 1. renewable energy	再生可能エネルギー
☐ 2. sustainable	持続可能な
☐ 3. global warming	地球温暖化
☐ 4. greenhouse effect	温室効果
☐ 5. infrared light	赤外線
☐ 6. fossil fuel	化石燃料
☐ 7. Industrial Revolution	産業革命(歴史上の出来事)
☐ 8. time constant	時定数
☐ 9. mitigate	~を和らげる、軽くする
☐ 10. transition	移行、推移
☐ 11. vending machine	自動販売機
☐ 12. solar power generation	太陽光発電
☐ 13. wind power generation	風力発電
☐ 14. gas-fired power generation	ガス火力発電
☐ 15. CO₂ emission	二酸化炭素排出(量)
☐ 16. solar panel	太陽電池板、ソーラーパネル
☐ 17. on-site	現場で、現場の
☐ 18. battery	バッテリー、電池
☐ 19. emerging	新たに生じる、新興の
20. hydrogen	水素



The followings are questions based on the contents of the session. Watch the session and answer each question.

[1] Explain the benefits and problems of renewable energy.

Benefits	
Problems	
Problems	
[2] Give an e	example of renewable energy and explain how it works
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[1] The following is the summary passage of the session. Write down the appropriate words in the following blanks of the passage. You may use the same words for several blanks.

One of the main causes of global warming is the use of (
( ). The use of fossil fuels ( ) a large amount of
$CO_2$ . The use of fossil fuels started after the Industrial Revolution, and
we have consumed large amounts of fossil fuels for about a hundred years.
Fossil fuels, on the other hand, have been produced over billions of years,
resulting in a huge ( ) in time constants for the production
and the consumption of fossil fuels. In order to solve this problem of the
( ) in time constants and ( ) global warming,
we need a ( ) of our energy sources from fossil fuels to
renewable energy sources that emit no ( ). Solar power
and wind power are the main ( ) energy sources, but they
account for only ( ) percent of Japan's electricity
generation or power supply. In addition, we cannot (
power generation by either solar or wind power, and other
adjustable power supplies are needed to ( ) the gap
between the demand for electricity and renewable power generation.
At present, we have to rely on ( ) ( ) for this
after all, and so it is difficult to reduce $CO_2$ ( ). For this reason,
we need new ways to increase renewable energy generation, and
solar panels and the use of ( ) are good solutions.

[2] Write do	wn what you learned	I through today'	s session.	